Access DB# 109830

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: TUAN VU Examiner #: 79545 Date: 12-5-03
Art Unit: 2124 Phone Number 305 7207 Serial Number: 09 604 987
Mail Box and Bldg/Room Location: SY16 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: BINDING BY HASH

Inventors (please provide full names): PARTHASARATHY, SRIVATSAN

~~PRATNER~~ PRATSCHNER, S ; SINCLAIR, C

Earliest Priority Filing Date: 06/28/2000

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Method for facilitating integrity of application program comprising

(1) • providing assembly w/ manifest containing list of modules that make up the assembly

(2) • the manifest w/ hash of contents of the modules in the list

(3) • providing a manifest of a assembly w/ at least one of a referenced assembly comprising the manifest

(4) • providing a hash of such manifest of at least one referenced assembly

(1) & (2) are more crucial

BEST AVAILABLE COPY

STAFF USE ONLY

Searcher: David Hollocway
Searcher Phone #: 308-7794
Searcher Location: CPK2 4B30
Date Searcher Picked Up: 12-
Date Completed: 12-
Searcher Prep & Review Time: 60
Clerical Prep Time:
Online Time: 120

PTO-1590 (8-01)

Type of Search

NA Sequence (#)
AA Sequence (#)
Structure (#)
Bibliographic Yes
Litigation
Fulltexts U
Patent Family
Other

Vendors and cost where applicable

STN
Dialog # 907 '00
Questel/Orbit
Dr.Link
Lexis/Nexis
Sequence Systems
WWW/Internet ✓
Other (specify)

```
Set      Items   Description
S1       81965   HASH? OR DIGITAL?()SIGN? OR CHECKSUM? OR CHECK()SUM? ? OR -
             MESSAGE()DIGEST()FUNCTION?
S2     2982633   MODULE? OR APPLICATION? OR COMPONENT? OR SOFTWARE()PROGRAM?
              OR MACHINE()CODE?
S3      674807   DYNAMIC? OR RUNTIME? OR BINDING? OR HOT OR LIVE OR ON(2N)F-
            LY OR INTERDEPENDENT?
S4      831108   ASSEMBL? OR METADATA? OR META()DATA OR VERSION?()INFORMATI-
             ON?
S5      739029   MANIFEST? OR LIST? OR CONTENT? OR INVENTORY OR INVENTORIES
S6           1   S1 AND S2 AND S3 AND S4 AND S5
S7         470   S1 AND S2 AND S3
S8          40   S7 AND (S4 OR S5)
S9           8   S1(3N)S2(5N)S3
S10         46   S6 OR S8 OR S9
S11         18   S10 AND IC=(G06F? OR H04L?)
S12         18   IDPAT (sorted in duplicate/non-duplicate order)
S13         18   IDPAT (primary/non-duplicate records only)
File 347:JAPIO Oct 1976-2003/Aug(Updated 031202)
         (c) 2003 JPO & JAPIO
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200378
         (c) 2003  Thomson Derwent
```

13/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015702528 **Image available**
WPI Acc No: 2003-764721/200372
Related WPI Acc No: 2001-123032; 2001-123033; 2001-327759; 2001-335326
XRPX Acc No: N03-612440

Dynamic **link library file protection method in computer system, involves comparing version number and** hash **value of replacement version of** dynamic **link library file, with highest version of file installed on computer system**

Patent Assignee: MICROSOFT CORP (MICT)
Inventor: JAMAL H M A; KRISHNASWAMI B S; SIKKA A; THOMAS A F
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6618735	B1	20030909	US 99141757	P	19990630	200372 B
			US 2000607738	A	20000630	

Priority Applications (No Type Date): US 99141757 P 19990630; US 2000607738 A 20000630
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6618735	B1		11	G06F-015/16	Provisional application US 99141757

Abstract (Basic): US 6618735 B1

NOVELTY - A copy of a **dynamic** link library (DLL) file is saved, before performing change including overwriting of the DLL file with a replacement version of the DLL file. The validity of the change to the file is checked, by comparing version number and **hash** value of the replacement version with highest version of file installed on the computer system. If the change is invalid, the change is undone with the stored copy.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) computer-readable medium storing DLL file protection program;
(2) DLL file updating method; and
(3) computer-readable medium storing DLL file updating program.

USE - For protecting **dynamic** -link library (DLL) file of computer system.

ADVANTAGE - Prevents unauthorized importation of system files during **application** installation, to prevent invalid system files from being added to the system, effectively.

DESCRIPTION OF DRAWING(S) - The figure shows the operating system.
operating system (70)
system file protection (SFP) service (80)
file system drivers (88)
protected file **list** (92)
temporary directory (96)
pp; 11 DwgNo 2/5

Title Terms: **DYNAMIC** ; LINK; LIBRARY; FILE; PROTECT; METHOD; COMPUTER; SYSTEM; COMPARE; VERSION; NUMBER; **HASH** ; VALUE; REPLACE; VERSION; **DYNAMIC** ; LINK; LIBRARY; FILE; HIGH; VERSION; FILE; INSTALLATION; COMPUTER; SYSTEM
Derwent Class: T01
International Patent Class (Main): **G06F-015/16**
International Patent Class (Additional): **G06F-017/00** ; **G06F-017/30**
File Segment: EPI

13/5/6 **(Item 6 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

014319273 **Image available**
WPI Acc No: 2002-139975/200218
XRPX Acc No: N02-105470

Facilitating method for integrity of assembly **employable by** application **programs during** runtime **providing** manifest **with a** hash **of the** contents **of at least one** module **of a** list **of** modules

Patent Assignee: MICROSOFT CORP (MICT)
Inventor: PARTHASARATHY S; PRATSCHNER S J; SINCLAIR C T
Number of Countries: 094 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200201351	A2	20020103	WO 2001US40632	A	20010430	200218	B
AU 200159808	A	20020108	AU 200159808	A	20010430	200235	

Priority Applications (No Type Date): US 2000604987 A 20000628
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200201351	A2	E	29	G06F-009/00	
AU 200159808	A			G06F-009/00	Based on patent WO 200201351

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

Abstract (Basic): WO 200201351 A

NOVELTY - The method involves providing an **assembly** with a **manifest** that contains a **list** of **modules** that make up the **assembly** . The **manifest** is provided with a **hash** of the **contents** of at least one **module** of the **list** of **modules** . Providing the **manifest** with a **hash** of the **contents** of at least one **module** of the **list** of **modules** involves providing the **manifest** with a **hash** of each **module** of the **list** of **modules** that constitutes the **assembly** .

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for a computer readable medium and for a system for facilitating integrity of **assemblies** employable by **application** programs at **runtime** .

USE - For ensuring integrity of **components** employed by **application** programs at **runtime** .

ADVANTAGE - Verifies integrity of **components** at **runtime** .

DESCRIPTION OF DRAWING(S) - The figure shows an **assembly** referencing an **assembly** with multiple modes.

Dwg.1/7

Title Terms: FACILITATE; METHOD; INTEGRITY; **ASSEMBLE** ; EMPLOY; APPLY; PROGRAM; **MANIFEST** ; **HASH** ; **CONTENT** ; ONE; **MODULE** ; **LIST** ; **MODULE**
Derwent Class: T01
International Patent Class (Main): **G06F-009/00**
File Segment: EPI

13/5/7 **(Item 7 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

014319261 **Image available**
WPI Acc No: 2002-139963/200218
XRPX Acc No: N02-105458
Shared software components **or** assemblies , **for** application **programs, that are provided with security and integrity during** runtime **by the use of** digital signature **keys**
Patent Assignee: MICROSOFT CORP (MICT)
Inventor: PARTHASARATHY S; PRATSCHNER S J; SINCLAIR C T
Number of Countries: 095 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200201332	A2	20020103	WO 2001US40634	A	20010430	200218	B
AU 200159809	A	20020108	AU 200159809	A	20010430	200235	
EP 1311920	A2	20030521	EP 2001933378	A	20010430	200334	
			WO 2001US40634	A	20010430		
BR 200112106	A	20031028	BR 200112106	A	20010430	200374	
			WO 2001US40634	A	20010430		

Priority Applications (No Type Date): US 2000605602 A 20000628
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200201332	A2	E	37	G06F-001/00	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
AU 200159809	A			G06F-001/00	Based on patent WO 200201332
EP 1311920	A2	E		G06F-001/00	Based on patent WO 200201332
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
BR 200112106	A			G06F-001/00	Based on patent WO 200201332

Abstract (Basic): WO 200201332 A

NOVELTY - A published **assembly** name is unique because it is published with a publisher's public key. This prevents others from publishing an updated version of the **assembly** that claims to be published from the same publisher, as they do not have a matching private key.

USE - For **application** programs.

ADVANTAGE - Prevents name spoofing.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of an **assembly** referencing an **assembly** having multiple **modules** .

First **assembly** 10

Module 14

Second **assembly** 20

Dwg.1/10

Title Terms: SHARE; SOFTWARE; **COMPONENT** ; **ASSEMBLE** ; APPLY; PROGRAM; SECURE; INTEGRITY; DIGITAL; SIGNATURE; KEY
Derwent Class: T01
International Patent Class (Main): **G06F-001/00**
File Segment: EPI

13/5/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013491749 **Image available**
WPI Acc No: 2000-663692/200064
Related WPI Acc No: 1998-542869
XRPX Acc No: N00-491718

Object synchronization in multiprocessor system, involves searching preset synchronization construct using global data structure, when local data structure does not contain data referring to preset construct

Patent Assignee: SUN MICROSYSTEMS INC (SUNM)
Inventor: LINDHOLM T G

Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6108754	A	20000822	US 97832090	A	19970403	200064 B
			US 9853911	A	19980402	

Priority Applications (No Type Date): US 9853911 A 19980402; US 97832090 A 19970403
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6108754	A		19	G06F-012/08	CIP of application US 97832090 CIP of patent US 5875461

Abstract (Basic): US 6108754 A

NOVELTY - Local data structure that is part of thread-local cache assigned to thread, is searched using **hash** value, for data referring to a specific synchronization construct associated with object. If the local data structure does not contain reference data, then the specific synchronization construct is searched using a global data structure containing data associating objects with synchronization constructs.

DETAILED DESCRIPTION - When searching the local data structure, an in-progress reference is set to indicate an identity of object. The termination of association between object and specific synchronization construct is prevented, when in-progress reference identifies the object. The local data structure is searched for reference data using **hash** value produced by applying data identifying object to a **hash** function. INDEPENDENT CLAIMS are also included for the following:

(a) object synchronizing program with thread;

(b) computer system

USE - Used in multiprocessor computer system to manage **dynamic** association between objects and broad category of synchronization constructs e.g. mutexes, monitors, semaphores to synchronize objects with threads.

ADVANTAGE - Manages the **dynamic** association between objects and synchronization constructs through the use of local data structures in thread local cache. Data structures that are part of thread local cache need not be locked before the thread accesses the data structure. Thus, overhead and **contention** resulting from looking-up synchronization constructs using global data structures that are protected by global locks, is avoided.

DESCRIPTION OF DRAWING(S) - The figure shows block diagram of object synchronization **module** .

pp; 19 DwgNo 3/6

Title Terms: OBJECT; MULTIPROCESSOR; SYSTEM; SEARCH; PRESET; CONSTRUCTION; GLOBE; DATA; STRUCTURE; LOCAL; DATA; STRUCTURE; CONTAIN; DATA; REFER; PRESET; CONSTRUCTION
Derwent Class: T01
International Patent Class (Main): **G06F-012/08**
File Segment: EPI

```
Set     Items   Description
S1      81965   HASH? OR DIGITAL?()SIGN? OR CHECKSUM? OR CHECK()SUM? ? OR -
             MESSAGE()DIGEST()FUNCTION?
S2    2982633   MODULE? OR APPLICATION? OR COMPONENT? OR SOFTWARE()PROGRAM?
              OR MACHINE()CODE?
S3     674807   DYNAMIC? OR RUNTIME? OR BINDING? OR HOT OR LIVE OR ON(2N)F-
             LY OR INTERDEPENDENT?
S4     831108   ASSEMBL? OR METADATA? OR META()DATA OR VERSION?()INFORMATI-
             ON?
S5     739029   MANIFEST? OR LIST? OR CONTENT? OR INVENTORY OR INVENTORIES
S6          1   S1 AND S2 AND S3 AND S4 AND S5
S7        470   S1 AND S2 AND S3
S8         40   S7 AND (S4 OR S5)
S9          8   S1(3N)S2(5N)S3
S10        46   S6 OR S8 OR S9
S11        18   S10 AND IC=(G06F? OR H04L?)
S12        18   IDPAT (sorted in duplicate/non-duplicate order)
S13        18   IDPAT_(primary/non-duplicate records only)
S14     61767   MC=(T01-E04 OR T01-J20A OR T01-J20B2A OR T01-S03)
S15        15   S14 AND S7
S16        10   S15 NOT S10
S17         9   S16 AND IC=(G06F? OR H04L? OR H04N?)
File 347:JAPIO Oct 1976-2003/Aug(Updated 031202)
        (c) 2003 JPO & JAPIO
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200378
        (c) 2003  Thomson Derwent
```

17/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015683545 **Image available**
WPI Acc No: 2003-745734/200370
XRPX Acc No: N03-597432
Signed binary description file generation method for computer network, involves associating module license information with hash of corresponding module and related information with corresponding unique identification names
Patent Assignee: ROBBINS V L (ROBB-I); ROTHROCK L V (ROTH-I); ROZAS C V (ROZA-I)
Inventor: ROBBINS V L; ROTHROCK L V; ROZAS C V
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030159055	A1	20030821	US 2001967738	A	20010928	200370	B

Priority Applications (No Type Date): US 2001967738 A 20010928
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030159055	A1		12	H04L-009/32	

Abstract (Basic): US 20030159055 A1
NOVELTY - Several set of **module** license information and unique identification (ID) names for related program, plug-in, verification agent, code and **dynamic modules** are received. Each ID name corresponds to set of license information including **hash** of corresponding **module** and related information signed with a key. The license information is associated with corresponding ID name, and stored in signed binary description file as associated pairs.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) software system integrity verification method;
(2) verification system; and
(3) computer readable medium storing software system integrity verification process.
USE - For generating signed binary description file for multiple **modules** such as program **module** , plug-in **module** , verification agent, code and **dynamic modules** used in network computer system and public network such as Internet.
ADVANTAGE - Verifies the integrity of the system with multiple **components** and reduces the expense of signature verification. Manages the binary description files for each **components** , adds complexity and overhead to normal software operation.
DESCRIPTION OF DRAWING(S) - The figure shows a flow diagram of the signed binary description file generation process.
pp; 12 DwgNo 1/4
Title Terms: SIGN; BINARY; DESCRIBE; FILE; GENERATE; METHOD; COMPUTER; NETWORK; ASSOCIATE; **MODULE** ; LICENCE; INFORMATION; **HASH** ; CORRESPOND; **MODULE** ; RELATED; INFORMATION; CORRESPOND; UNIQUE; IDENTIFY; NAME
Derwent Class: T01
International Patent Class (Main): **H04L-009/32**
File Segment: EPI

17/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015387383 **Image available**
WPI Acc No: 2003-448328/200342
XRPX Acc No: N03-357634
Processor enumeration method involves starting processors in compute node, based on operating system activation request
Patent Assignee: CROSSLAND J B (CROS-I); KAUSHIK S D (KAUS-I); KUMAR M J

(KUMA-I); O'SHEA D J (OSHE-I); RANKIN L J (RANK-I); INTEL CORP (ITLC)
Inventor: CROSSLAND J B; KAUSHIK S D; KUMAR M J; O'SHEA D J; RANKIN L J; CROSSLAND J; KAUSHIK S; KUMAR M; O'SHEA D; RANKIN L
Number of Countries: 101 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030065752	A1	20030403	US 2001971211	A	20011003	200342	B
WO 200329993	A2	20030410	WO 2002US31327	A	20020930	200342	

Priority Applications (No Type Date): US 2001971211 A 20011003
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030065752	A1		28	G06F-015/177	
WO 200329993	A2	E		G06F-013/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW

Abstract (Basic): US 20030065752 A1
NOVELTY - Several processors are enumerated to a system architecture operating system in which the compute node is **hot** plugged, in response to a **hot** -plug reset. The processors in the compute node are started in response to an operating system activation request.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) recorded medium storing the processor enumeration program;
(2) processor enumeration apparatus; and
(3) processor enumeration system.
USE - For enumeration of processors in compute node, and also for handheld devices, **digital signal** processing devices, network PCs, mini computers and main frame computers.
ADVANTAGE - Enables device enumeration in an advanced configuration and power management interface (ACPI) mechanisms. Avoids implementation of a new peripheral **component** interconnect (PCI) definition for supporting **hot** plug of processor memory node.
DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining the enumeration of the processors.
pp; 28 DwgNo 8/19
Title Terms: PROCESSOR; METHOD; START; PROCESSOR; COMPUTATION; NODE; BASED; OPERATE; SYSTEM; ACTIVATE; REQUEST
Derwent Class: T01; U22
International Patent Class (Main): **G06F-013/00 ; G06F-015/177**
International Patent Class (Additional): **G06F-007/38**
File Segment: EPI

17/5/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014584678 **Image available**
WPI Acc No: 2002-405382/200243
Related WPI Acc No: 2000-543286; 2002-226031; 2002-350629; 2002-706169; 2003-090419
XRPX Acc No: N02-318243
Universal signature object for digital data e.g. for computer systems, where universal signature object binds a digital signature **to digital data regardless of the file format of the version of the digital data**
Patent Assignee: PRIVATE EXPRESS TECHNOLOGIES PTE LTD (PRIV-N); FONG K (FONG-I); MADHAV R M (MADH-I); TEO K (TEOK-I); TOH E (TOHE-I)
Inventor: FONG K; MADHAV R M; TEO K; TOH E; MAHARJAN M R
Number of Countries: 097 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200233524	A1	20020425	WO 2001SG211	A	20011017	200243 B
US 20020048372	A1	20020425	US 2000242013	P	20001019	200243
			US 2000242113	P	20001019	
			US 2001981588	A	20011016	
AU 200211192	A	20020429	AU 200211192	A	20011017	200255
AU 200211195	A	20020429	AU 200211195	A	20011018	200255

Priority Applications (No Type Date): US 2000242113 P 20001019; US 2000242013 P 20001019; US 2001981588 A 20011016; US 2000242014 P 20001019 ; US 2000242015 P 20001019; US 2001887157 A 20010621

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200233524	A1	E	45	G06F-001/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

US 20020048372	A1	H04L-009/00	Provisional application US 2000242013
			Provisional application US 2000242113
AU 200211192	A	G06F-001/00	Based on patent WO 200233524
AU 200211195	A	H04L-012/00	Based on patent WO 200233891

Abstract (Basic): WO 200233524 A1

NOVELTY - Computer-readable medium stores a universal signature object for **binding** a **digital signature** to digital data, comprises: one version of the digital data, where each version has a file format; a **digital signature** of signature data, where the signature data is a function of the digital data; and information concerning an **application** compatible with the file format of the versions.

DETAILED DESCRIPTION - INDEPENDENT CLAIM included for the following:universal signature object viewer; method for **digitally signing** digital data; signing program

USE - For computer systems.

ADVANTAGE - Provides a universal signature object that can bind **digital signatures** to digital data, regardless of the file format. With such an object, people and businesses could more easily exchange documents and countersign data, such as contracts, without reverting to hard copies. Furthermore, with such an object, the digital data and all **digital signatures** can easily be archived.

DESCRIPTION OF DRAWING(S) - The diagram shows a universal signature object.

pp; 45 DwgNo 1/7

Title Terms: UNIVERSAL; SIGNATURE; OBJECT; DIGITAL; DATA; COMPUTER; SYSTEM; UNIVERSAL; SIGNATURE; OBJECT; BIND; DIGITAL; SIGNATURE; DIGITAL; DATA; FILE; FORMAT; VERSION; DIGITAL; DATA

Derwent Class: T01; W01

International Patent Class (Main): **G06F-001/00** ; **H04L-009/00** ; **H04L-012/00**

File Segment: EPI

17/5/4 (Item 4 from file: 350)

014403269 **Image available**

WPI Acc No: 2002-223972/200228

XRPX Acc No: N02-171441

Instruction processing method for digital data processor, involves compiling identified pipeline dependencies in multiple instructions and field of code block to control hardware-based dependency checking

Patent Assignee: LUCENT TECHNOLOGIES INC (LUCE)

Inventor: BATTEN D; D'ARCY P G; GLOSSNER C J; JINTURKAR S; THILO J; VASSILIADIS S; WIRES K E

Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6260189	B1	20010710	US 98152744	A	19980914	200228	B

Priority Applications (No Type Date): US 98152744 A 19980914
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6260189	B1		9	G06F-009/44	

Abstract (Basic): US 6260189 B1
NOVELTY - Pipeline dependencies in multiple instructions are identified and instructions are grouped into code block having a field which indicates types of pipeline dependencies. The identification and grouping steps are implemented in a compiler (104) in conjunction with compilation of instructions and field of code block to control **application** of hardware-based dependency checking in processor (108).
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(a) Instructions processing apparatus;
(b) Machine readable medium
USE - For pipelined microprocessors and digital data processors e.g. central processing unit, very long instruction word processor, single issue processor, **digital signal** processors, **application** specific integrated circuit (ASIC), personal computer, mainframe computer, network computer, workstation and servers.
ADVANTAGE - Allows a compiler to reduce the number of instruction stalls that arises due to execution unit latencies in a pipeline processor with the help of compiler controlled **dynamic** dispatch (CCDD). Decreases the execution time of given program, as well as the amount of required checking and renaming hardware, with only minimal increase in code size and complexity. Enables or disables hardware pipeline checking effectively to reduce unnecessary stalling.
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of processing system.
Compiler (104)
Processor (108)
pp; 9 DwgNo 6/12
Title Terms: INSTRUCTION; PROCESS; METHOD; DIGITAL; DATA; PROCESSOR; COMPILE; IDENTIFY; PIPE; MULTIPLE; INSTRUCTION; FIELD; CODE; BLOCK; CONTROL; HARDWARE; BASED; DEPEND; CHECK
Derwent Class: T01
International Patent Class (Main): **G06F-009/44**
File Segment: EPI

17/5/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014086292 **Image available**
WPI Acc No: 2001-570506/200164
Related WPI Acc No: 2001-483510; 2003-831752
XRPX Acc No: N01-425187
Data storage controller in computer system, instantiates disk interface and bus interface for interfacing data storage controller to data storage device and to host respectively, using programmable logic device
Patent Assignee: REALTIME DATA LLC (REAL-N); BUCK J (BUCK-I); FALLON J J (FALL-I); MCERLAIN S J (MCER-I); PICKEL P F (PICK-I)
Inventor: BUCK J; FALLON J J; MCERLAIN S J; PICKEL P F; WOLF-SONKIN Y
Number of Countries: 089 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200157642	A2	20010809	WO 2001US3711	A	20010205	200164	B
AU 200136677	A	20010814	AU 200136677	A	20010205	200173	
EP 1179194	A1	20020213	EP 2001908852	A	20010205	200219	
			WO 2001US3711	A	20010205		
US 20020069354	A1	20020606	US 2000180114	P	20000203	200241	

Priority Applications (No Type Date): US 2001776267 A 20010202; US 2000180114 P 20000203; US 2001775905 A 20010202
Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
WO 200157642 A2 E 56 G06F-003/06
Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
AU 200136677 A G06F-003/06 Based on patent WO 200157642
EP 1179194 A1 E G06F-003/06 Based on patent WO 200157642
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR
US 20020069354 A1 G06F-009/00 Provisional application US 2000180114

Abstract (Basic): WO 200157642 A2
NOVELTY - A programmable logic device (22) is programmed by a **digital signal** processor (DSP) (21) to instantiate a disk interface (14) and a bus interface (15) for interfacing the data storage controller to a data storage device and to a host respectively. A non-volatile memory device stores logic codes associated with the DSP and the interfaces.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(a) Operating system loading method;
(b) **Application** program launching method
USE - For controlling storage and retrieval of data to and from data storage device including pseudo random, random access storage device, magnetic and optical tapes, magnetic and optical disk drives, synchronous **dynamic** random access memory (SDRAM) in computer system. Also for operating system loading and **application** program launching in computer system in home, business and scientific computing **application** .
ADVANTAGE - Storage bandwidth is increased effectively without decreasing data storage and retrieval rates.
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of data storage controller.
Disk interface (14)
Bus interface (15)
Digital signal processor (21)
Programmable logic device (22)
pp; 56 DwgNo 2/10
Title Terms: DATA; STORAGE; CONTROL; COMPUTER; SYSTEM; DISC; INTERFACE; BUS ; INTERFACE; INTERFACE; DATA; STORAGE; CONTROL; DATA; STORAGE; DEVICE; HOST; RESPECTIVE; PROGRAM; LOGIC; DEVICE
Derwent Class: T01
International Patent Class (Main): **G06F-003/06 ; G06F-009/00**
International Patent Class (Additional): **G06F-009/24 ; G06F-009/445 ; G06F-015/177**
File Segment: EPI

17/5/6 (Item 6 from file: 350)

013733879 **Image available**
WPI Acc No: 2001-218109/200122
Related WPI Acc No: 2002-395979
XRPX Acc No: N01-155497
Application **specific waveform generator for electronic test equipment, converts** digital signals **to analog pulses representing actual physical waveforms through use of mathematical modeling of physical system**

Patent Assignee: ASTEC INT LLC (ASTE-N)
Inventor: CAMPBELL R O; SESHAN C
Number of Countries: 019 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200067068	A2	20001109	WO 2000US11935	A	20000503	200122	B
US 6397173	B1	20020528	US 99304484	A	19990503	200243	

Priority Applications (No Type Date): US 99304484 A 19990503
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200067068	A2	E	49	G02F-000/00	
	Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE				
US 6397173	B1			G06F-009/455	

Abstract (Basic): WO 200067068 A2

NOVELTY - A processor including a mathematical model of a disk drive system controls the device. User interface enables user to communicate with the device, passing data between user and processor. Signal generator receives input signals from processor relating to mathematical model, and summer sums together output signal from signal generator and noise generator.

DETAILED DESCRIPTION - The signal generator includes two separate signal generators supplying output signals of same frequency, and interleaved together to create a signal at twice the frequency of the output signals. The output signals are digital, and noise signals from noise source are colored. Analog signals created within first frequency range are created at frequencies lower than the first frequency range by repeating portions of the digital output signal, which are repeated by storing output signals in the memory in repetitive fashion. The mathematical model provides a series of input signals to the signal generator and the processor stores certain patterns that are repeated often by the mathematical model in a look-up table.

USE - For user to employ in developing and testing disk drive channel electronics, and can be used for supplying **application** specific test signals for portions of system under test.

ADVANTAGE - Capable of outputting analog signals for **application** to the disk drive channel electronics. Using **dynamic** memory allows for continuous output of signals while creating new signal patterns. A stream of input data can be automatically created by integrated software or through external input from the user

DESCRIPTION OF DRAWING(S) - Drawing shows functional flow chart of the functionality of the test equipment for testing channel circuitry in accordance with the present invention.

pp; 49 DwgNo 7/15

Title Terms: APPLY; SPECIFIC; WAVEFORM; GENERATOR; ELECTRONIC; TEST; EQUIPMENT; CONVERT; DIGITAL; SIGNAL; ANALOGUE; PULSE; REPRESENT; ACTUAL; PHYSICAL; WAVEFORM; THROUGH; MATHEMATICAL; PHYSICAL; SYSTEM
Derwent Class: P81; S01; T01; T03; U23
International Patent Class (Main): G02F-000/00; **G06F-009/455**
International Patent Class (Additional): **G06F-017/50**
File Segment: EPI; EngPI

17/5/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013466821 **Image available**
WPI Acc No: 2000-638764/200062
XRPX Acc No: N00-473788

Dynamic **class loader in a software environment for the** dynamic **loading of classes during the execution of program files particularly in a Java processing environment**

Patent Assignee: IBM CANADA LTD (IBMC); INT BUSINESS MACHINES CORP (IBMC)
Inventor: CHAN V S; CHIANG S S; STOKES D K; THEIVENDRA L W

Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
CA 2255042	A1	20000530	CA 2255042	A	19981130	200062	B
US 6470494	B1	20021022	US 99450205	A	19991129	200273	

Priority Applications (No Type Date): CA 2255042 A 19981130
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
CA 2255042	A1	E	23	G06F-009/445	
US 6470494	B1			G06F-009/45	

Abstract (Basic): CA 2255042 A1

NOVELTY - A **dynamic** class loader (40) is used in conjunction with a default class loader (30) to load a class into a memory (28) in a form suitable for interpretation by a Java interpreter (26). The class loader maintains a set of pointers to the classes that have already been loaded for interpretation and the pointers are stored in a **hash** table and are indexed by class name. The class loader also works in conjunction with one or more byte representations of class files (42) provided by the user of an **application** and a second **hash** table is used to store pointers to these representations, indexed by class name.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for a method of loading a class in executable form and for a method of loading files.

USE - **Dynamic** loading of classes during execution of program files.

ADVANTAGE - Greater flexibility in use and design of programs.

DESCRIPTION OF DRAWING(S) - The drawing is a schematic illustration of the present invention in a preferred embodiment

Dynamic class loader (40)
Default class loader (30)
Memory (28)
Java interpreter (26)
Class files (42)
pp; 23 DwgNo 2/3

Title Terms: **DYNAMIC** ; CLASS; LOAD; SOFTWARE; ENVIRONMENT; **DYNAMIC** ; LOAD ; CLASS; EXECUTE; PROGRAM; FILE; PROCESS; ENVIRONMENT
Derwent Class: T01
International Patent Class (Main): **G06F-009/445** ; **G06F-009/45**
International Patent Class (Additional): **G06F-009/45**
File Segment: EPI

17/5/8 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013466820 **Image available**
WPI Acc No: 2000-638763/200062
XRPX Acc No: N00-473787

Archiving tool for archiving files in an archive file that provides customized entry names for the archived files

Patent Assignee: IBM CANADA LTD (IBMC); INT BUSINESS MACHINES CORP (IBMC)
Inventor: CHAN V S; CHIANG S S; STOKES D K; THEIVENDRA L W
Number of Countries: 002 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
CA 2255035	A1	20000530	CA 2255035	A	19981130	200062	B
CA 2255035	C	20020129	CA 2255035	A	19981130	200211	
US 6633892	B1	20031014	US 99432865	A	19991102	200368	

Priority Applications (No Type Date): CA 2255035 A 19981130
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
CA 2255035	A1	E	25	G06F-017/30	
CA 2255035	C	E		G06F-017/30	
US 6633892	B1			G06F-012/00	

Abstract (Basic): CA 2255035 A1

NOVELTY - A **dynamic** class loader (40) is used in conjunction with a default class loader (30) to load a class into a memory (28) in a form suitable for interpretation by a Java interpreter (26). The class loader maintains a set of pointers to classes that have already been loaded into the memory and the pointers are preferably stored in a **hash** table and are indexed by class name. The class loader also works in conjunction with one or more byte representations of class files (42) provided by the user or **application** and a second **hash** table is used by the class loader to store pointers to these byte representations, which are indexed by class name.

DETAILED DESCRIPTION - AN INDEPENDENT CLAIM is included for a method of archiving files.

USE - Archiving files in a system providing customized entry names.

ADVANTAGE - Enhanced flexibility of use and design of programs.

DESCRIPTION OF DRAWING(S) - The drawing is a schematic diagram of the present invention

Dynamic class loader (40)
Default class loader (30)
Memory (28)
Java interpreter (26)
Class files (42)
pp; 25 DwgNo 2/3

Title Terms: TOOL; FILE; ARCHIVE; FILE; CUSTOMISATION; ENTER; NAME; FILE
Derwent Class: T01
International Patent Class (Main): **G06F-012/00 ; G06F-017/30**
International Patent Class (Additional): **G06F-017/00**
File Segment: EPI

17/5/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

011260450 **Image available**
WPI Acc No: 1997-238353/199722
XRPX Acc No: N97-196880

Computer system for protecting use of dynamically **linked executable** modules **- in which program** module **execution is aborted when procedure call to program** module **verifier results in verification denial being returned by program** module **verifier**

Patent Assignee: SUN MICROSYSTEMS INC (SUNM)
Inventor: MCMANIS C E
Number of Countries: 010 Number of Patents: 008
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 770957	A2	19970502	EP 96307347	A	19961009	199722	B
JP 9231068	A	19970905	JP 96279207	A	19961022	199746	
KR 97022747	A	19970530	KR 9647605	A	19961023	199823	
US 5757914	A	19980526	US 95547720	A	19951026	199828	
US 5970145	A	19991019	US 95547720	A	19951026	199950	
			US 97992079	A	19971217		
TW 378304	A	20000101	TW 96112575	A	19961015	200045	
US 6546487	B1	20030408	US 95547720	A	19951026	200327	
			US 97992079	A	19971217		
			US 99420946	A	19991019		
CN 1154515	A	19970716	CN 96122021	A	19961024	200376	

Priority Applications (No Type Date): US 95547720 A 19951026; US 97992079 A 19971217; US 99420946 A 19991019
Cited Patents: No-SR.Pub
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 770957	A2	E	11	G06F-009/445	
Designated States (Regional): DE FR GB NL SE					
JP 9231068	A		11	G06F-009/06	

KR 97022747	A	G06F-009/46	
US 5757914	A	H04L-009/00	
US 5970145	A	H04L-009/00	Cont of application US 95547720 Cont of patent US 5757914
TW 378304	A	G06F-009/06	
US 6546487	B1	H04L-009/00	Cont of application US 95547720 Cont of application US 97992079 Cont of patent US 5757914 Cont of patent US 5970145
CN 1154515	A	G06F-015/00	

Abstract (Basic): EP 770957 A

The computer system includes a program **module** verifier and at least two program **modules** , each of which includes a **digital signature** and an executable procedure. The first program **module** also includes a procedure call to the second procedure **module** , a procedure call to the program **module** verifier that is logically positioned in the first program **module** for execution prior to execution of the procedure call to the second program **module** , and instructions preventing execution of the procedure call to the second program **module** when the procedure call to the program **module** verifier results in verification denial being returned by the program **module** verifier.

The second program **module** includes an executable procedure to be performed in response to the procedure call by the first program **module** to the second program **module** , a procedure call to the program **module** verifier that is logically positioned in the second program **module** so as to be executed prior to completion of execution of the second program **module** 's executable procedure, and instructions preventing completion of execution of that executable procedure when the program **module** verifier returns a verification denial with respect to the first program **module** . The program **module** verifier responds to procedure calls by verifying the authenticity of an specified program **module** and by returning a verification confirmation or denial. When the program **module** verifier fails to verify the authenticity of a program **module** , the calling program **module** throws an exception and aborts its execution.

USE - Restricting use of executable **modules** such that each **module** can be **dynamically** linked only to other executable **modules** whose authenticity has been verified.

Dwg.1/3

Title Terms: COMPUTER; SYSTEM; PROTECT; **DYNAMIC** ; LINK; EXECUTE; **MODULE** ; PROGRAM; **MODULE** ; EXECUTE; ABORTION; PROCEDURE; CALL; PROGRAM; **MODULE** ; VERIFICATION; RESULT; VERIFICATION; RETURN; PROGRAM; **MODULE** ; VERIFICATION

Derwent Class: T01

International Patent Class (Main): **G06F-009/06** ; **G06F-009/445** ; **G06F-009/46** ; **G06F-015/00** ; **H04L-009/00**

International Patent Class (Additional): G04F-011/28; **G06F-001/00**

File Segment: EPI

```
Set     Items   Description
S1     103846   HASH? OR DIGITAL?()SIGN? OR CHECKSUM? OR CHECK()SUM? ? OR -
             MESSAGE()DIGEST()FUNCTION?
S2    6652304   MODULE? OR APPLICATION? OR COMPONENT? OR SOFTWARE()PROGRAM?
              OR MACHINE()CODE?
S3    4100027   DYNAMIC? OR RUNTIME? OR BINDING? OR HOT OR LIVE OR ON(2N)F-
             LY OR INTERDEPENDENT?
S4     528990   ASSEMBL? OR METADATA? OR META()DATA OR VERSION?()INFORMATI-
             ON?
S5    2086147   MANIFEST? OR LIST? OR CONTENT? OR INVENTORY OR INVENTORIES
S6          5   S1 AND S2 AND S3 AND S4 AND S5
S7       2960   S1 AND S2 AND S3
S8        194   S7 AND (S4 OR S5)
S9       5758   S1(5N)S2
S10        34   S8 AND S9
S11        39   S6 OR S10
S12        32   RD (unique items)
S13        27   S12 NOT PY>2000
S14        27   S13 NOT PD>20000628
File   8:Ei Compendex(R) 1970-2003/Nov W4
         (c) 2003 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2003/Oct
         (c) 2003 ProQuest Info&Learning
File  65:Inside Conferences 1993-2003/Nov W5
         (c) 2003 BLDSC all rts. reserv.
File   2:INSPEC 1969-2003/Nov W4
         (c) 2003 Institution of Electrical Engineers
File  94:JICST-EPlus 1985-2003/Nov W5
         (c)2003 Japan Science and Tech Corp(JST)
File 111:TGG Natl.Newspaper Index(SM) 1979-2003/Dec 04
         (c) 2003 The Gale Group
File 233:Internet & Personal Comp. Abs. 1981-2003/Jul
         (c) 2003, EBSCO Pub.
File 144:Pascal 1973-2003/Nov W4
         (c) 2003 INIST/CNRS
File  34:SciSearch(R) Cited Ref Sci 1990-2003/Nov W5
         (c) 2003 Inst for Sci Info
File  62:SPIN(R) 1975-2003/Oct W3
         (c) 2003 American Institute of Physics
File  99:Wilson Appl. Sci & Tech Abs 1983-2003/Oct
         (c) 2003 The HW Wilson Co.
```

```
Set     Items   Description
S1      84427   HASH? OR DIGITAL?()(SIGN OR SIGNS OR SIGNING) OR CHECKSUM?
             OR CHECK()SUM? ? OR MESSAGE()DIGEST()FUNCTION?
S2    9641721   MODULE? OR APPLICATION? OR COMPONENT? OR SOFTWARE()PROGRAM?
              OR MACHINE()CODE?
S3    5352645   DYNAMIC? OR RUNTIME? OR BINDING? OR HOT OR LIVE OR ON(2N)F-
             LY OR INTERDEPENDENT?
S4    1515452   ASSEMBL? OR METADATA? OR META()DATA OR VERSION?()INFORMATI-
             ON?
S5    8865980   MANIFEST? OR LIST? OR CONTENT? OR INVENTORY OR INVENTORIES
S6          8   S1(4N)S2(S)S3(S)(S4 OR S5)
S7          0   S1(10N)S2(10N)S3(10N)S4(S)S5
S8         83   S1(S)S2(S)S3(S)(S4 OR S5)
S9         29   S1(15N)S2(15N)S3(S)(S4 OR S5)
S10       101   S6 OR S8 OR S9
S11        75   RD (unique items)
S12        50   S11 NOT PY>2000
S13        45   S12 NOT PD>20000628
File 275:Gale Group Computer DB(TM) 1983-2003/Dec 04
         (c) 2003 The Gale Group
File  47:Gale Group Magazine DB(TM) 1959-2003/Dec 04
         (c) 2003 The Gale group
File  75:TGG Management Contents(R) 86-2003/Nov W4
         (c) 2003 The Gale Group
File 636:Gale Group Newsletter DB(TM) 1987-2003/Dec 04
         (c) 2003 The Gale Group
File  16:Gale Group PROMT(R) 1990-2003/Dec 04
         (c) 2003 The Gale Group
File 624:McGraw-Hill Publications 1985-2003/Dec 04
         (c) 2003 McGraw-Hill Co. Inc
File 484:Periodical Abs Plustext 1986-2003/Nov W5
         (c) 2003 ProQuest
File 613:PR Newswire 1999-2003/Dec 05
         (c) 2003 PR Newswire Association Inc
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 239:Mathsci 1940-2003/Jan
         (c) 2003 American Mathematical Society
File 696:DIALOG Telecom. Newsletters 1995-2003/Dec 04
         (c) 2003 The Dialog Corp.
File 553:Wilson Bus. Abs. FullText 1982-2003/Oct
         (c) 2003 The HW Wilson Co
File 621:Gale Group New Prod.Annou.(R) 1985-2003/Dec 04
         (c) 2003 The Gale Group
File 674:Computer News Fulltext 1989-2003/Nov W4
         (c) 2003 IDG Communications
File  88:Gale Group Business A.R.T.S. 1976-2003/Dec 04
         (c) 2003 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 635:Business Dateline(R) 1985-2003/Dec 05
         (c) 2003 ProQuest Info&Learning
File  15:ABI/Inform(R) 1971-2003/Dec 05
         (c) 2003 ProQuest Info&Learning
File   9:Business & Industry(R) Jul/1994-2003/Dec 04
         (c) 2003 Resp. DB Svcs.
File  13:BAMP 2003/Nov W4
         (c) 2003 Resp. DB Svcs.
File 810:Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
File 610:Business Wire 1999-2003/Dec 05
         (c) 2003 Business Wire.
File 647:CMP  Computer Fulltext 1988-2003/Nov W5
         (c) 2003 CMP Media, LLC
File  98:General Sci Abs/Full-Text 1984-2003/Oct
         (c) 2003 The HW Wilson Co.
File 148:Gale Group Trade & Industry DB 1976-2003/Dec 04
         (c)2003 The Gale Group
```

```
Set     Items   Description
S1        160   HASH? OR DIGITAL?()(SIGN OR SIGNS OR SIGNING) OR CHECKSUM?
                OR CHECK()SUM? ? OR MESSAGE()DIGEST()FUNCTION?
S2      48116   MODULE? OR APPLICATION? OR COMPONENT? OR SOFTWARE()PROGRAM?
                OR MACHINE()CODE?
S3       8227   DYNAMIC? OR RUNTIME? OR BINDING? OR HOT OR LIVE OR ON(2N)F-
                LY OR INTERDEPENDENT?
S4       2156   ASSEMBL? OR METADATA? OR META()DATA OR VERSION?()INFORMATI-
                ON?
S5      20522   MANIFEST? OR LIST? OR CONTENT? OR INVENTORY OR INVENTORIES
S6          7   S1 AND S2 AND S3
S7          5   S6 NOT PY>2000
S8          5   S7 NOT PD>20000628
File 256:SoftBase:Reviews,Companies&Prods. 82-2003/Oct
         (c)2003 Info.Sources Inc
```

8/3,K/3
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.

00102775 DOCUMENT TYPE: Review

PRODUCT NAMES: Microsoft Internet Explorer 4.0 (577375); Netscape Communicator (528463)

TITLE: Microsoft, Netscape Line Up Allies
AUTHOR: Rodriguez, Karen
SOURCE: Interactive Week, v4 n24 p33(2) Jul 21, 1997
ISSN: 1078-7259
HOMEPAGE: http://www.interactive-week.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

REVISION DATE: 20020730

...most recent version of the Hypertext Markup Language (HTML) in their browsers. The latest standard, **Dynamic** HTML, allows new browsers to display animated, textured, layered, and retrieved content without multiple trips...
...new Memphis OS. To improve security, Microsoft is adding AuthentiCode security technology to IE to **digitally sign** ActiveX and Java **components** .